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A People Powered Transition

Deloitte Energy Consumer Insights 2023

Preface

Decoding the Consumer in Australia's Energy Transition

In the race toward net zero by 2050, Australia's energy transition demands a critical examination from an often-neglected perspective – the consumer. As we stand on the precipice of an energy revolution, it becomes imperative to cast the spotlight on the impact of this transformation on individuals and households, understanding their concerns, aspirations, and challenges.

Challenges Unveiled – Energy Costs and Consumer Diversity

Our focus is twofold: first, dissecting the repercussions of energy bill increases on diverse consumer profiles; second, understanding the values and perceptions influencing decisions in today's evolving energy landscape.

Willingness to Adapt – Consumption, Investment, and Barriers

We explore the willingness of consumers to alter consumption behaviours and invest in sustainable practices. Simultaneously, we identify potential barriers hindering active consumer participation in the transformative journey.

Testing the Waters – Consumer Receptivity and Stakeholder Support

The study assesses consumer appetite for market activations and innovations, along with the level of support expected from industry and government. This succinct exploration is our commitment to bridging the gap between policy discourse and consumer realities, fostering an energy transition that is not only enduring, but also resonates with the aspirations and challenges faced by every Australian.



Executive summary

The energy transition needs tailored strategies for different customer segments to overcome education and financial barriers.

Executive summary

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To eat or to heat

Consumers are grappling with the mounting risk of financial hardship due to increasing energy bills. Alarmingly, twothirds experienced a surge in energy bills in the last year, and 36% express concerns about affording energy in the next 12 months. This propels heightened awareness, with the large majority (94%) exhibiting a clear understanding of their energy costs. Additionally, a mere 15% of respondents are uncertain about the portion of their monthly income allocated to energy, underscoring a growing trend of consumers actively seeking information to manage escalating energy expenses.

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On board the transition train

There is evident support for transitioning to clean energy, with the majority (58%) supporting the shift to net-zero energy generation by 2050. Whilst there is acknowledgement that the transition is a collective responsibility of all stakeholders, the highest expectations are placed on the government. Even financially vulnerable consumers show a high level of responsibility and even a willingness to pay more for sustainable energy solutions, underscoring the broad support for the energy transition Noteworthy: 79% of the AU population are actively making conscious efforts to reduce consumption.

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A two speed consumer story

Consumer preferences in energy solutions vary by demographics. Some examples: financially distressed consumers show lower solar panel adoption (27%) than non-distressed (35%). Higher-income respondents favour electric vehicles and solar panels. Older consumers prefer energyefficient appliances; while younger ones opt for electric vehicles and electric battery storage systems. This data reveals a diverse landscape of consumer choices and barriers to uptake, indicating the need for a nuanced approach to sustainable energy solutions.

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Price: the ultimate roadblock

The main challenge in promoting energy-saving behaviour is consumers' price sensitivity, with 62% prioritising cost in energy decisions and 90% unwilling to accept a price increase of more than 10% for renewable energy sources. Although awareness of energy efficiency programs is high, knowledge gaps persist, particularly among the elderly, low-income, and rural demographics. Only 12% feel confident in understanding energy plans and renewables, emphasising the necessity for education initiatives.

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Forget the silver bullet

Financial benefits significantly drive consumer interest in renewable energy solutions, with 77% of respondents showing interest in grants, incentives, and policy. Interest varies in sustainable mortgages (51%) and financial advice (54%). Real-time monitoring (72%) and costefficient technologies (56%) are favoured, underscoring consumers' desire to achieve savings through the adoption of renewable energy products. Demographic factors, such as age and income, influence preferences, highlighting the need for tailored strategies to engage diverse customer segments.

Survey overview

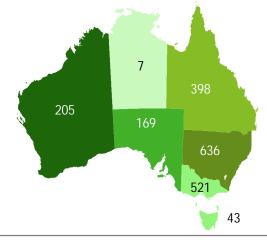
The study comprises a diverse and representative sample of 2000+ energy consumers across Australia.

Survey overview

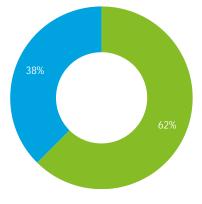
The study comprises a diverse and representative sample of 2000+ energy consumers from various age groups, genders, and regions across Australia, all of whom are either solely (62%) or jointly (38%) responsible for making decisions about their household's energy products and services. Geographic distribution of respondents is concentrated across East-Coast States; however respondents are relatively equally distributed across age brackets and male and female genders.

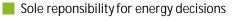
What is your postcode? # of survey respondents

79% of survey respondents reside on the East-Coast of Australia

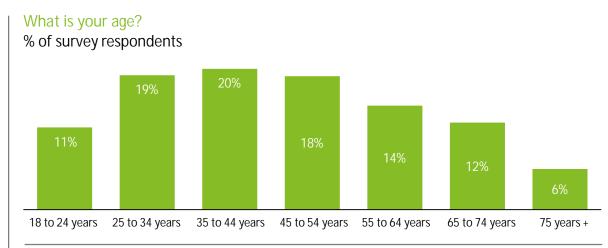


Are you responsible for making decisions about your household's energy products and services? % of survey respondents

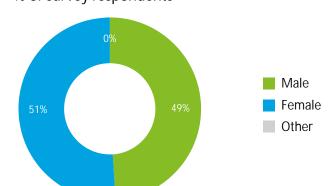




Joint reponsibility for energy decisions



How do you currently describe yourself? % of survey respondents



Survey overview

Reflective of the broader Australian population and concentration of citizens across Eastern States, 77% of survey respondents reside in metropolitan regions, and reflect a wide variety of living situations and family structures. Nearly two-thirds (59%) of respondents own the property they reside in, while around half (49%) reside in single storey houses. The survey sample is weighted towards respondents in lower-income households, with 56% of respondents earning annual household incomes of less than \$100,000, reflecting the broader Australian population.



What is your annual household income?¹

% of survey respondents

20% 17% 16% 14% 13% 5% 4% 3% 2% 1% Live alone Couple, no Couple Single Live with Couple Couple, Single Single Live with Other children with young with older children parent parent, parent(s) friends / (please parent children children have left with young with older children grandparent house specify) home children children have left (s) share home

Notes: (1) In line with Census insights on income in Australia using administrative data (released 02/05/2023)

Which best describes your household situation? % of survey respondents

29% 27% 18% 11% 7% 3% 2% 1% 1% \$200,001 to \$250,001 to \$300,001 to Under \$60,000 to \$100,001 to \$150,001 to \$400,001 Unsure / \$60,000 \$100,000 \$150,000 \$200,000 \$250,000 \$300,000 \$400,000 Prefer not or more to say

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Context and challenge

"It's expensive. Power bills are huge these days."

Context and challenge

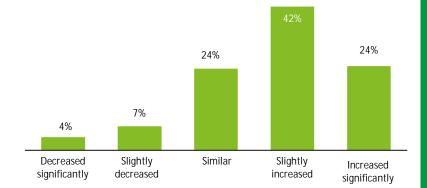
Consumers face significant challenges as more Australians are at risk of falling into financial hardship from rising energy bills. This is driving greater awareness, monitoring and management of energy costs as consumers increasingly look to reduce consumption and offset higher energy bills.

On average, how much do you pay for electricity/gas per year? % of survey respondents

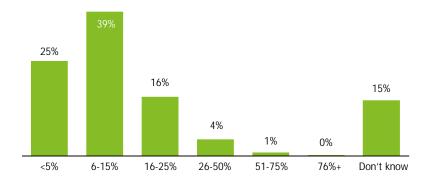


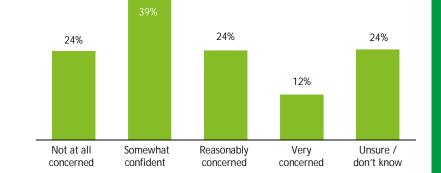
What portion of your monthly income goes towards energy?

How has this changed in the last 12 months? % of survey respondents



How confident are you with regards to being able to afford energy in the next 12 months? % of survey respondents





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43% of participants reported annual electricity expenses surpassing \$1,500. Two-thirds of respondents experienced an upswing in their energy costs within the past year.

60% of participants dedicate a substantial (>6%) of their monthly incomes to cover energy costs. Notably, 36% express apprehension about their ability to afford energy in the coming 12 months.

The majority of respondents (94-95%) exhibit a clear understanding of their energy costs¹, with only a small fraction lacking awareness. Additionally, a significant 85% confidently know the proportion of their monthly income dedicated to covering energy expenses.

¹Note: Whilst there is high awareness of the rising costs, majority of the consumers indicate they are struggling to understand their energy plans and renewable energy options.

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% of survey respondents

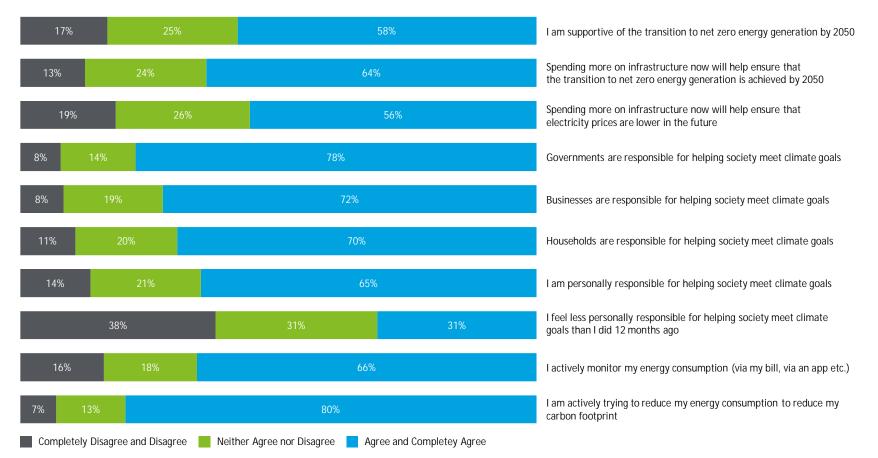
Consumer sentiment

"It would be quite expensive to do energy transition at this time of economic crises."

Consumer sentiment

There is a clear willingness among consumers to transition to clean energy sources, with the majority of Australians supporting the shift to net-zero energy generation.

For each of the following statements, select the degree to which you agree or disagree % of survey respondents



58% of respondents express endorsement for the shift towards net-zero energy generation by 2050. Furthermore, there is a widespread consensus that all stakeholders must contribute, with a notable 77% placing the highest expectations on the government to play a crucial role.

65% of respondents acknowledge a personal responsibility for aiding society in meeting climate goals. Those facing financial hardship exhibit only a slightly lower likelihood of feeling this personal responsibility (60%) compared to those who do not have concerns about upcoming energy bills (68%).

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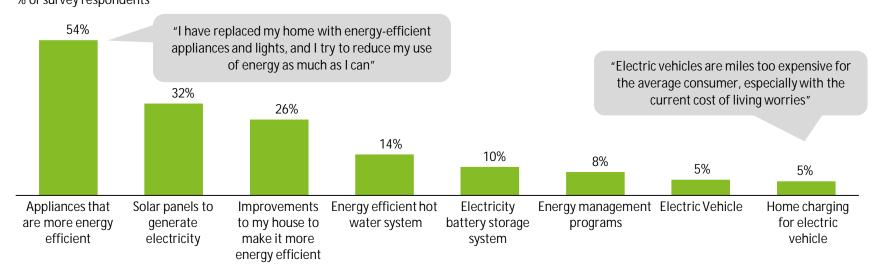
Consumer behaviour

"I have replaced my home with energy efficient appliances and lights, and I try to reduce my use of energy as much as I can."

Consumer behaviour

Consumers' preferences for energy solutions vary significantly across age, geographical and income-based demographics, revealing a diverse landscape of consumer choices and highlighting the need for tailored approaches in engaging consumers around energy solutions.

Which of the following have you purchased or used? % of survey respondents



of higher-income respondents have purchased electric vehicles compared to

only 3% of lower-income respondents

of respondents over the age of 40 have purchased energy-efficient appliances compared to only 48% of respondents under the age of 40

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Purchasing behaviour is similar for financially and non-financially distressed consumers. However, acquisition of solar panels stands out, with only 27% of financially distressed consumers having made such purchases vs. 35% among their non-financially distressed counterparts.



Respondents with annual household incomes over \$100k are more likely to have purchased higher-end products such as electric vehicles, solar panels, and electric battery storage systems compared to those with annual household incomes below \$100k. Ŷ

A generational divide in purchasing patterns is evident, as respondents aged 40+ show a higher likelihood of investing in energy-efficient appliances, and solar panels. Conversely, those under the age of 40 exhibit a greater propensity to purchase electric vehicles, electric battery storage systems, and energy-efficient hot water systems.

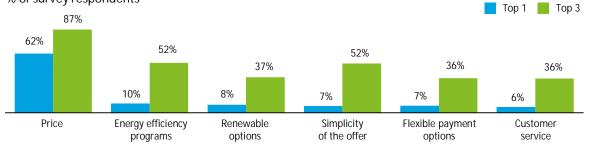
Consumer needs

"I live in a unit so can't have solar, even if I wanted to."

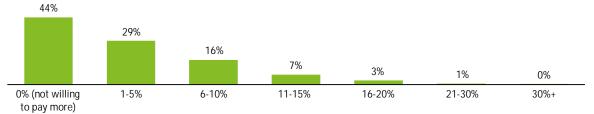
Consumer needs

The critical challenge in promoting energy-saving behaviours amongst consumers remains price sensitivity and therefore an unwillingness to pay a premium for renewable energy solutions.

Which energy plan components are most important to you? % of survey respondents

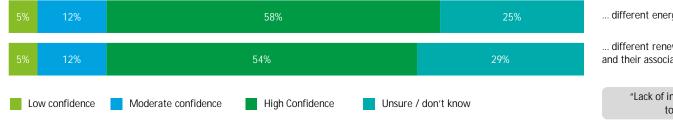


How much would you be willing to pay more for energy from renewable sources? % of survey respondents



How confident do you feel in your understanding of...

% of survey respondents



62^{*}

of survey respondents cite pricing as the most important component of energy plans, while 87% of respondents place pricing in the top-3 most important factors for energy plans

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of survey respondents indicate a willingness to pay a premium of between 1%-10% for energy from renewable sources, however 45% are unwilling to pay any premium at all

... different energy plan options and their associated costs?

... different renewable investment options (e.g. solar panels) and their associated costs?

"Lack of information and knowledge about what to buy and what to avoid doing"



While both higher-income (61%) and lower-income (63%) respondents prioritise price as the most crucial component of an energy plan, it's noteworthy that lower-income individuals place significantly more emphasis on flexible payment options (37% vs. 25%).



44% of respondents remain unwilling to pay any premium for energy from renewable sources. Remarkably, 50% of the respondents facing financial distress are still willing to pay a premium, underscoring the large support for the energy transition of this cohort.

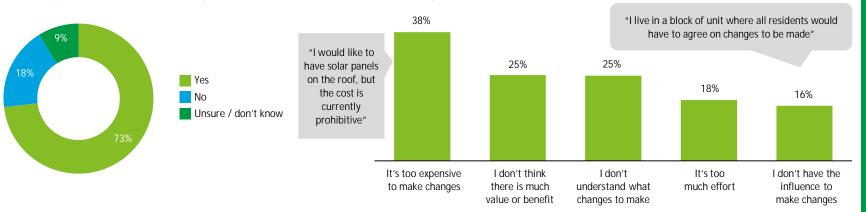
While respondents clearly value alternative energy plan options such as energy efficiency programs and renewable options, their perceived knowledge of such offerings are low, indicating a clear need for increased education.

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Consumer needs

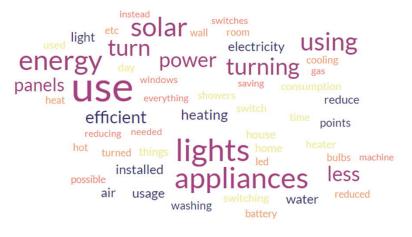
There are clear blockers preventing consumers from taking action to reduce their energy consumption, with cost as a major barrier alongside a lack of certainty of the benefits and the best ways to do so.

Have you considered taking any actions towards reducing your energy consumption? % of survey respondents



What prevents you from taking action to reduce your energy consumption? % of survey respondents

What actions have you taken?





Consumers are primarily looking towards basic solutions for reducing their energy consumption, such as energy-efficient appliances (e.g. lights) and reducing usage of energyintensive home products when possible.

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A large portion (73%) of the respondents have considered taking actions towards reducing their energy consumption, with no notable differences between low vs. high household incomes.

40% of financially distressed respondents who have not considered taking action to reduce consumption cite cost as the primary reason for not making changes, compared to 31% of non-financially distressed respondents who have not yet acted.

30% of participants residing in units or apartments cite a 'lack of influence' as the main reason to not reduce their energy consumption, revealing the practical constraints they face.

"I live in a unit so can't have solar even if I wanted to"

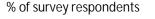
Consumer appetite

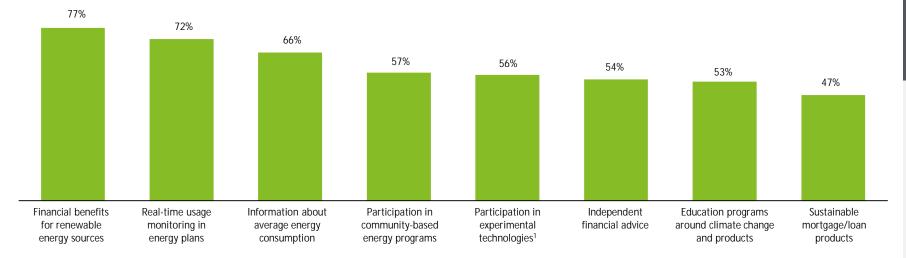
"I haven't yet bought a household battery for solar storage, (as I'm) waiting on a government incentive."

Consumer appetite for solutions

While various respondents display strong interest in a range of products and solutions oriented around the energy transition, financial incentives for adopting renewable energy sources alongside solutions that enable ongoing monitoring and comparison of energy consumption are the clear favourites.







Consumers across income groups, age cohorts and area of residence are primarily interested in financial benefits for renewable energy sources, highlighting the role governments need to play in offering financial incentives for the adoption of renewable energy.

% indicated interest in financial benefits for renewable energy sources, while consumers were least interested in sustainable mortgage and loan products (47% interested)

"I haven't yet bought a household battery for solar storage, (as I'm) waiting on a government incentive."

While a similar proportion of financially distressed and non-distressed respondents are interested in financial benefits for renewable energy sources (76% and 77% respectively), financially distressed respondents show greater interest in experimental cost-cutting technologies¹ and monitoring products relative to their non-distressed counterparts.

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Higher-income respondents express a greater interest in most of the listed solutions, particularly in sustainable mortgage and loan products, with 58% of higher-income respondents expressing interest

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compared to 38% of lower-income consumers.

Younger respondents (40 years and below) display a higher level of interest in solutions for the energy transition, particularly in education programs (63% interested vs. 46% for older respondents) and sustainable mortgage and loan products (64% interested vs. 36% for older respondents).

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Australia's response

Introducing four plays to increase energy transition participation

Australia's potential response

To expedite Australia's energy transition, the government should strategically deploy initiatives in grants, incentives and policy, emphasising financial benefits. Simultaneously, educational and marketing campaigns can raise awareness about climate change and energy-efficient practices. Investments in product and technology, particularly real-time monitoring, should be prioritised to meet consumer demands. Lastly, incorporating financial management measures, such as sustainable loan products and economic guidance, can further encourage the widespread adoption of renewable energy solutions.

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F	lighest interest	$\overline{\mathfrak{S}}$	₽	Moderate interest
	Grants, Incentives & Policy	Education & Marketing	Product & Technology	Financial Management
Bold play	Federal, state and local policy, grants and incentives to stimulate adoption and investment	Education programs around the energy transition and opportunities to shift behaviour	Products and services to manage and optimise energy usage for end users and businesses	Financial products and services to support the investment in the energy transition
Example initiatives	Financial benefits for choosing renewable energy options	Energy plans that offer real-time usage monitoring and cost tracking	More information about average energy consumption of similar households	Independent financial advice regarding energy products and consumption
		Education program around climate change and to learn which products to invest in	Participation in community-based energy programs (e.g. batteries)	Sustainable mortgage and loan products
			Participation in experimental technologies (e.g. virtual power plants) particularly if it could provide cost savings	

Stay tuned for our upcoming blog post, where we zoom into Deloitte's perspective on Australia's response.

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For a detailed discussion on these insights

Get in touch

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